



The DU S&T Particles

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Partnering with Industry for an Affordable and Effective Defense

The Dual Use Science & Technology Program Quarterly Newsletter

March 10 Dual Use Workshop Part of DUSD (S&T) Monthly Workshop Series

Mark your calendars! March 10, 2000, at the Marriott Gateway, in Crystal City, the office of the Deputy Under Secretary for Defense for Science and Technology will feature the Dual Use Program as part of their monthly workshop series on evolving technologies.

The March workshop will feature Dr. Jacques Gansler, Under Secretary of Defense, Acquisition, Technology, and Logistics as the opening speaker, and presentations on the partnerships between the government and the automotive

industry, component manufacturers, and companies in MEMs technology. Specific projects featured include: Meeting Warfighter Needs with Development of Commercial Anti-lock Brake System for the HMMWV, Series Hybrid-Electric Propulsion for Military Trucks, CAD-Driven Laser Forming Process Eliminating Costly Manufacturing Practices, and Dual Use MEMs Application Results in Low Cost Antenna.

The workshop begins at 8:30 AM and will conclude by 10:30 AM. Space at the workshop is limited, so register early. To register, please e-mail: mrinc@erols.com or call Karen Coleman 703-243-2867 or visit the web site <http://www.dtic.mil/dusdst/seminar.html>.

FY 2001 Dual Use Science and Technology Solicitation Released

The DUS&T Solicitation for the Fiscal Year 2001 Program was released January 18, 2000 and is posted on the DUS&T web page <http://www.dtic.mil/dust>. The solicitation is a joint solicitation between the Army, Navy, and Air Force. Each of the Services have identified technical topic areas where they want to partner with industry to develop dual use technologies.

This is the fourth solicitation issued by the Services since 1998. The Federal funds available for cost share for the FY01 Program is approximately \$60M dollars. A total of 110 technical topics have been submitted by the services in the focus areas of Affordable Sensors, Advanced Propulsion, Power & Fuel Efficiency, Information & Communications Systems, Advanced Materials & Manufacturing, Environmental Technologies, Weapons Systems Sustainment, and Medical and Bioengineering Technologies.

Industry participants had an opportunity to learn

more details about the Service topic interests at the Dual Use Investment Strategy Conference which was held February 3, in New Orleans. The conference provided companies an opportunity to learn more about the DUS&T Program and hear briefings on each technical topic area. In addition, participants were able to discuss, one-on-one, with service topic representatives, to learn more about the specific needs of the services in each of the topic areas. Over 260 participants attended. Failure to attend the conference does not prohibit companies from submitting proposals.

The solicitation, requirements for the white paper process, a description of each of the technical topic areas, and points of contacts for each topic are available on the DUS&T web site; <http://www.dtic.mil/dust>. Interested companies are encouraged to visit the website and to participate in the Program. The due date for receipt of optional white papers is February 29, 2000. Proposals are due April 28, 2000.

Featured Project

A Project of the: U.S. Army,
U.S. Army Communications-Electronics Command
Research and Development Center, Night Vision and
Electronic Sensors Directorate

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Military and Industry Build World's Smallest Infrared Camera

FORT BELVOIR, Va. - Night Vision and Electronic Sensors Directorate (U.S. Army Communications-Electronics Command, Research and Development Center) and Indigo Systems Corporation of Santa Barbara, California, announced the development of the world's smallest infrared camera, the UL3 alpha which is sensitive in the 8-12 micron waveband. The camera weighs only 6 ounce and is about the size of a D cell battery. Many military applications are contemplated such as surveillance, mine fields, and as a sensor for unmanned air vehicles. The camera is a major leap ahead over previous infrared cameras. Its small size and low power consumption (~1 watt) will lead to revolutionary military and commercial applications.

Camera development was initiated in 1997 as part of the DUS&T Program. It is an excellent example of how the development of dual use products can drastically reduce military acquisition costs once a large consumer market develops for the product.

Indigo has also announced it has entered into a strategic partnership Mine Safety Appliance Corporation of Pennsylvania to develop and market the UL3 family for fire fighting applications. Through this commercial market, the military costs will continue to be reduced.

Thermal imaging cameras, which were introduced to the fire service market in the mid-to late '90s, use infrared technology that allows firefighters to see through smoke and darkness

during search and rescue efforts. The cameras also help firefighter pinpoint "hot spots" from a fire that may be hidden in walls and ceilings.

Because of the life saving potential infrared cameras offer, demand for them among fire departments is at an all-time high. In response, many local and state governments are considering legislation to provide funding to fire departments to help purchase infrared cameras. New Jersey is expected to be the first state to enact such legislation later this year.

With the DUST program, a new revolutionary camera has been produced that will reduce production costs significantly and increase the market penetration of the technology in both the commercial and military sectors. Because of its small size and weight, the camera could be mounted on a firefighter's helmet with minimal impact to the firefighter. Previous IR cameras mounted on helmets added too much weight and strain on the neck.

NVESD is located at Fort Belvoir, Va. and has been the world's leading developer of night vision equipment since the early '60s.

Privately held, Indigo Systems Corporation was established in 1996 as a start up. The company is a premier developer of advanced electronic vision components and systems with a particular emphasis on the infrared spectrum.

Calendar of Events



January	FY01 Solicitation Release
February	Investment Strategy Conference White Papers Due
March	Dual Use Seminar
April	FY01 Proposals Due

Visit the DU S&T Web Page for
more information and details
www.dtic.mil/dust